



The $T'(n)$ function for modified function is:-

$$T'(n) = n^2 * (t_x + t_y + t_i + t_j)$$

Therefore $T'(n) > T(n)$, $T'(n) \approx 0.0008$ and $T(n) \approx 0.0005$ where:-

* $T'(n)$ is the time complexity of modified function
 * $T(n)$ is the time complexity of the old function.

* n is the input size.

* t_x is the time complexity $x = x + 1$
 * t_y is the time complexity $y = i + j$
 * t_i is the time complexity $i = i + 1$
 * t_j is the time complexity $j = j + 1$